

Application No. 09/588,462  
Submission with RCE filed 01/13/2005

Attorney's Docket No. 0119-076

### REMARKS

Claims 1, 3-10, and 12-16 are pending. Claims 7 and 16 have been amended and are now independent. Support for these amendments can be found at various places in the application, including for example page 6, line 22 et seq.

In the final Office Action, claims 1, 3-8, 10, and 12-16 were rejected under 35 U.S.C. § 102(b) for anticipation by U.S. Patent No. 5,570,423 to Walker et al. ("Walker '423") and claim 9 was rejected under 35 U.S.C. § 103(a) for obviousness over a combination of Walker '423 and U.S. Patent No. 5,796,819 to Romesburg ("Romesburg").

As pointed out in the Response filed on January 11, 2005, the final Action contends on page 6 that "Walker '423 uses acoustic signal propagation time  $t_{ak}$  to balance distance  $d_{ak}$  between loudspeaker and microphone, an unknown variable". This contention is not completely understood. As explained in Walker '423 at col. 4, ll. 44-52, the time  $t_{ak}$  and the distance  $d_{ak}$  are just the shortest propagation time and distance between a loudspeaker 1 and a microphone 2. According to col. 4, ll. 21-24, these parameters would seem to be set by the construction of the telephone terminal (see FIG. 2, reference numeral 31) and thus have little if anything to do with Applicants' claimed arrangement. Simply stated, Walker '423 does not describe estimating the distance between a loudspeaker and a microphone based on adaptive filter arrangement coefficients derived from signals of the loudspeaker and microphone, as defined in claim 1.

In addition and also as pointed out in the Response, Walker '423 says nothing about loudspeaker volume range control. As best understood, the final Action's argument on this point appears to relate to an "amplification value", which is mentioned at col. 10, ll. 32-35, of Walker '423. It is important to recognize that this "amplification value" relates to the amount of amplification applied to signals received from the microphone 2, not to loudspeaker volume range. Walker '423 at col. 10, ll. 17-31 makes clear that it is the operation of a compander and the signals from the microphone that are being considered at that point. Walker '423's amplification value simply has nothing to do with loudspeaker volume range control.

To the extent that Walker '423 has anything to say about loudspeaker volume, it might be the passage at col. 8, ll. 51-61, which describes adjusting the local playback

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volume of a hands-free speaking system, e.g., a speakerphone. Nevertheless, this passage merely describes volume adjustment based on local noise measurement, and not on the basis of an estimated distance from the loudspeaker to the microphone.

It will be noted with particular respect to currently amended claims 7 and 16 that such noise adjustment is neither the same as nor suggestive of loudspeaker volume range control where the ratio or the difference between the energies of the loudspeaker signal and the microphone signal is used to estimate distance between the loudspeaker and the microphone.

As previously pointed out, Romesburg fails to remedy the deficiencies of Walker '423.

Accordingly, since Walker '423 and Romesburg fail to disclose (or suggest) all of the limitations of the pending claims, including the currently amended claims 7 and 16, for at least the above reasons, both the anticipation rejections of claims 1, 3-8, 10, and 12-16 and the obviousness rejection of claim 9 cannot stand.

It is believed that this application is in condition for allowance. An early Notice of same is respectfully solicited. If the Examiner has any questions, the undersigned attorney may be telephoned at the number given below.

Respectfully submitted,



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